

Setting up the server

Starting New Container and Querying Web Server For Default Page

```
PS C:\Users\Asus> docker run --rm -d --name apache -p 80:80 httpd:2.4
8e539c6c8c131c32b7d6d06960e9cfe84cc46e2efb4cdbc289037adb5a81a58
PS C:\Users\Asus>
PS C:\Users\Asus> curl localhost

StatusCode      : 200
StatusDescription : OK
Content         : <html><body><h1>It works!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
                  Keep-Alive: timeout=5, max=100
                  Connection: Keep-Alive
                  Accept-Ranges: bytes
                  Content-Length: 45
                  Content-Type: text/html
                  Date: Sat, 15 May 2021 10:14:22 GMT
                  ETag: "2d-432a5e4a73a80..."
Forms           : {}
Headers        : {[Keep-Alive, timeout=5, max=100], [Connection, Keep-Alive], [Accept-Ranges, bytes], [Content-Length, 45]...}
Images         : {}
InputFields    : {}
Links          : {}
ParsedHtml     : mshtml.HTMLDocumentClass
RawContentLength : 45
```

Replacing HTML File with New Content

```
PS C:\Users\Asus\Desktop> docker cp index.html apache:/usr/local/apache2/htdocs/
PS C:\Users\Asus\Desktop> curl localhost

StatusCode      : 200
StatusDescription : OK
Content         : <html><body><h1>It works in Docker!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
                  Accept-Ranges: bytes
                  Content-Length: 56
                  Content-Type: text/html
                  Date: Sat, 15 May 2021 10:14:57 GMT
                  ETag: "38-5c258ef0becc0"
                  Last-Modified: Sat, 15 May 2021 07:01:47 GMT
                  Server:...
Forms           : {}
Headers        : {[Accept-Ranges, bytes], [Content-Length, 56], [Content-Type, text/html], [Date, Sat, 15 May 2021 10:14:57 GMT]...}
Images         : {}
InputFields    : {}
Links          : {}
ParsedHtml     : mshtml.HTMLDocumentClass
RawContentLength : 56
```

Managing Volumes

```
PS C:\Users\Asus\Desktop> docker volume ls
DRIVER      VOLUME NAME
local       b58cf677a2d2262bd6b0958f93a35d0851e198e05ffd924574a631c0f43ae836
PS C:\Users\Asus\Desktop> docker volume create myvolume
myvolume
PS C:\Users\Asus\Desktop> docker volume ls
DRIVER      VOLUME NAME
local       b58cf677a2d2262bd6b0958f93a35d0851e198e05ffd924574a631c0f43ae836
local       myvolume
PS C:\Users\Asus\Desktop> docker volume rm myvolume
myvolume
PS C:\Users\Asus\Desktop> docker volume ls
DRIVER      VOLUME NAME
local       b58cf677a2d2262bd6b0958f93a35d0851e198e05ffd924574a631c0f43ae836
PS C:\Users\Asus\Desktop>
```

Mounting Volumes on Containers

```
PS C:\Users\Asus\Desktop> docker stop apache
apache
PS C:\Users\Asus\Desktop> docker run --rm -d --name apache -p 80:80 -v httpd_htdocs:/usr/local/apache2/htdocs/ httpd:2.4
24e893b387027536c3c4b9ec0cd83fbd5f629ed6be515b197accbdf7405f PS C:\Users\Asus\Desktop> docker cp in
ers\Asus\Desktop> curl localhost

StatusCode      : 200
StatusDescription : OK
Content         : <html><body><h1>It works in Docker!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
                  Keep-Alive: timeout=5, max=100
                  Connection: Keep-Alive
                  Accept-Ranges: bytes
                  Content-Length: 56
                  Content-Type: text/html
                  Date: Sat, 15 May 2021 10:25:35 GMT
                  ETag: "38-5c258ef0becc0..."

Forms           : {}
Headers         : {[Keep-Alive, timeout=5, max=100], [Connection, Keep-Alive],
                  [Accept-Ranges, bytes], [Content-Length, 56]...}
Images          : {}
InputFields     : {}
Links           : {}
ParsedHtml      : mshtml.HTMLDocumentClass
RawContentLength : 56

PS C:\Users\Asus\Desktop> docker stop apache
apache
PS C:\Users\Asus\Desktop> docker run --rm -d --name apache -p 80:80 -v httpd_htdocs:/usr/local/apache2/htdocs/ httpd:2.4
7d141c9638d6eccc8add9c114dcd6eb02faa796a04f9039738e5e6814a6c72e7
PS C:\Users\Asus\Desktop> curl localhost

StatusCode      : 200
StatusDescription : OK
Content         : <html><body><h1>It works in Docker!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
                  Accept-Ranges: bytes
                  Content-Length: 56
                  Content-Type: text/html
                  Date: Sat, 15 May 2021 10:26:58 GMT
                  ETag: "38-5c258ef0becc0"
                  Last-Modified: Sat, 15 May 2021 07:01:47 GMT
                  Server:...
```

Mounting Host Directory on Container

```

PS C:\Users\Asus\Desktop> docker run --rm -d --name apache -p 80:80 -v C:\Users\Asus\Desktop:/usr/local/apache2/htdocs/ httpd:2.4
462e8be04d3c6614bcfc58a7955fd6d548fc1f4dbdafacdb26a6c3ee71f77ac
PS C:\Users\Asus\Desktop> curl localhost

StatusCode      : 200
StatusDescription : OK
Content         : <html><body><h1>It works in Docker!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
                  Keep-Alive: timeout=5, max=100
                  Connection: Keep-Alive
                  Accept-Ranges: bytes
                  Content-Length: 56
                  Content-Type: text/html
                  Date: Sat, 15 May 2021 10:33:45 GMT
                  ETag: "38-5c258ef18c232..."

Forms           : {}
Headers        : {[Keep-Alive, timeout=5, max=100], [Connection, Keep-Alive],
                  [Accept-Ranges, bytes], [Content-Length, 56]...}

Images          : {}
InputFields     : {}
Links           : {}
ParsedHtml      : mshtml.HTMLDocumentClass
RawContentLength : 56

```

Modifying index.html

```

PS C:\Users\Asus\Desktop> curl localhost

StatusCode      : 200
StatusDescription : OK
Content         : <html><body><h1>Activity 5 done 8!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
                  Keep-Alive: timeout=5, max=100
                  Connection: Keep-Alive
                  Accept-Ranges: bytes
                  Content-Length: 56
                  Content-Type: text/html
                  Date: Sat, 15 May 2021 10:36:32 GMT
                  ETag: "38-5c25bee226ce1..."

Forms           : {}
Headers        : {[Keep-Alive, timeout=5, max=100], [Connection, Keep-Alive],
                  [Accept-Ranges, bytes], [Content-Length, 56]...}

Images          : {}
InputFields     : {}
Links           : {}
ParsedHtml      : mshtml.HTMLDocumentClass
RawContentLength : 56

```